

condition of the atmosphere depends not merely on the temperature of the air, but also on its dryness, on the velocity of the wind, and on the suddenness of atmospheric changes, all combined with the physiological condition of the observer. A complete expression for the relation between atmospheric conditions and nervous sensations has not yet been obtained.

PRECIPITATION.

[In inches and hundredths.]

The distribution of precipitation for the current month, as determined by reports from about 2,500 stations, is exhibited on Chart III. The numerical details are given in Tables I, II, and III. The total precipitation for the current month was heaviest (from 9 to 12 inches) in a narrow belt on the western slope of the Appalachians, stretching from central Tennessee to southwest Virginia. Equally heavy rain fell over a small area of the western slope of the Sierra Nevada, in central California. The largest values at regular stations were: Halifax, 8.8; Portland, Me., 8.0; Neahbay, 7.2; Yarmouth, 7.0; Eureka and Sydney, 6.9.

The current departures from the normal precipitation are given in Table I, which shows that there was a slight excess in New England and in several smaller regions, but, in general, there was a slight deficiency. Large excesses were: Portland, Me., 4.6; Rochester, 3.4; Northfield, 3.1. Large deficits were: Cape Henry and Augusta, 3.8; Neahbay, 3.3; Charlotte and Chattanooga, 3.2; Vicksburg, 3.1; Columbia, 3.0.

The average departure for each district is also given in Table I. By dividing these by the respective normals the following corresponding percentages are obtained (precipitation is in excess when the percentages of the normals exceed 100):

Above the normal: New England, 128; middle Atlantic, 105; lower Lake, 140; North Dakota, 178; northern Slope, 204; middle Plateau, 130; southern Pacific, 127.

Normal: Florida Peninsula and northern Plateau.

Below the normal: south Atlantic, 54; east Gulf, 85; west Gulf, 73; Ohio Valley and Tennessee, 98; upper Lake, 67; upper Mississippi, 73; Missouri Valley, 73; middle Slope, 63; southern Slope (Abilene), 9; southern Plateau, 63; north Pacific, 72; middle Pacific, 93.

The years of greatest and least precipitation for March are given in the REVIEW for March, 1890. The precipitation for the current month was the greatest on record at: Portland, Me., 8.02; Northfield, 6.41; Cheyenne, 2.06; Huron, and Helena, 1.71; Williston, 1.80. It was the least on record at: Cape Henry, 1.38; Hannibal, 0.92; El Paso, T.

The total accumulated monthly departures from normal precipitation from January 1 to the end of the current month are given in the second column of the following table; the third column gives the ratio of the current accumulated precipitation to its normal value.

Districts.	Accumulated departures.	Accumulated precipitation.	Districts.	Accumulated departures.	Accumulated precipitation.
	Inches.	Percnt.		Inches.	Percnt.
Middle Atlantic.....	+ 0.40	104	New England.....	- 0.80	93
Florida Peninsula.....	+ 0.40	105	South Atlantic.....	- 1.70	87
Lower Lakes.....	+ 0.80	110	East Gulf.....	- 2.30	86
North Dakota.....	+ 1.10	153	West Gulf.....	- 0.80	93
Northern Slope.....	+ 0.40	121	Ohio Valley and Tenn.....	- 2.30	79
Middle Plateau.....	+ 0.30	107	Upper Lakes.....	- 2.30	72
North Pacific.....	+ 3.20	114	Upper Mississippi.....	- 1.30	64
			Missouri Valley.....	- 1.70	63
			Middle Slope.....	- 1.70	50
			Abilene (southern Slope).....	- 1.30	64
			Southern Plateau.....	- 0.40	75
			Northern Plateau.....	- 1.40	76
			Middle Pacific.....	- 1.00	93
			South Pacific.....	- 1.50	77

Details as to excessive precipitation are given in Tables XII and XIII.

The total monthly snowfall at each station is given in Table II. Its geographical distribution is shown on Chart VI. The southern limit of freezing temperatures and possible snow is shown on this chart by the isotherm of minimum 32°.

The depth of snow on the ground at the close of the month is shown on Chart VII.

HAIL.

The following are the dates on which hail fell in the respective States:

Alabama, 6, 11, 12, 31. Arizona, 5. Arkansas, 5, 6, 31. California, 1 to 4, 14, 26, 27, 28. Colorado, 22, 25, 27, 28. District of Columbia, 19. Florida, 10. Georgia, 18, 19, 30. Idaho, 12, 20, 24. Illinois, 26 to 29. Indiana, 6, 28, 29. Iowa, 27, 28, 30, 31. Kansas, 22, 27, 31. Kentucky, 29. Louisiana, 10, 17, 18. Mississippi, 10, 17, 31. Missouri, 27, 28, 29, 31. Nebraska, 27. Nevada, 25. New Hampshire, New Mexico, 2. New York, 30. North Carolina, 1, 11, 12, 18. Ohio, 26, 28, 29. Oklahoma, 1. Oregon, 29. South Dakota, 27. Tennessee, 1, 29, 30. Texas, 10, 11. Virginia, 29, 30. Washington, 6, 7, 20, 28, 29. West Virginia, 29. Wisconsin, 28, 31.

SLEET.

The following are the dates on which sleet fell in the respective States:

Alabama, 11, 12, 19. Arkansas, 4, 12 to 15, 23. California, 1, 2, 3. Colorado, 20, 22, 25, 28, 31. Connecticut, 2, 11, 16, 19. Delaware, 10, 11, 23. District of Columbia, 11, 23. Georgia, 11, 18, 19. Idaho, 1, 5, 24 to 30. Illinois, 3, 4, 5, 10, 14, 15, 18, 22, 23, 26. Indiana, 1, 6. Indian Territory, 14, 15. Iowa, 4, 5, 11, 27, 31. Kansas, 1 to 4, 6, 13, 14, 17, 21, 22, 23, 31. Kentucky, 3, 5, 11, 14, 19, 23. Louisiana, 12. Maine, 3, 4, 7, 12, 27, 29. Maryland, 1, 11, 16, 19, 23, 24, 26. Massachusetts, 2, 7, 11, 15, 16, 17, 19, 29. Michigan, 5, 6, 25, 28, 29, 31. Minnesota, 5, 18, 27 to 31. Mississippi, 3, 11, 18, 19. Missouri, 2 to 5, 8, 11 to 15, 22, 23, 27. Montana, 11, 13, 30. Nebraska, 1 to 5, 12, 17, 18, 22, 28, 30, 31. Nevada, 1, 2, 4, 8, 16, 26 to 30. New Hampshire, 6, 7, 19, 26, 29, 30. New Jersey, 1, 10 to 13, 15, 16, 23, 24. New Mexico, 4, 5, 17. New York, 1, 2, 7, 10, 11, 12, 16, 19, 29, 30. North Carolina, 3, 11, 23, 24. North Dakota, 25, 28, 29, 30. Ohio, 1, 5, 6, 16, 24, 26. Oklahoma, 2, 3, 14, 15, 18. Oregon, 1, 2, 5, 6, 7, 26 to 30. Pennsylvania, 1, 7, 10, 11, 15, 16, 19, 26. South Carolina, 13, 24. South Dakota, 4, 15, 31. Tennessee, 3, 11, 15, 19, 23, 24. Texas, 2, 3, 4, 6, 15. Utah, 4, 10, 17, 28, 30. Vermont, 7, 19, 29, 30, 31. Virginia, 1, 11, 26. Washington, 6, 27, 29, 30. West Virginia, 1, 6, 10, 15, 23. Wisconsin, 5, 6, 9, 25, 27, 30, 31.

WIND.

The prevailing winds for March, 1896, viz, those that were recorded most frequently, are shown in Table I for the regular Weather Bureau stations.

The resultant winds, as deduced from the personal observations made at 8 a. m. and 8 p. m., are given in Table IX. These latter resultants are also shown graphically on Chart IV, where the small figure attached to each arrow shows the number of hours that this resultant prevailed, on the assumption that each of the morning and evening observations represents one hour's duration of a uniform wind of average velocity. These figures indicate the relative extent to which winds from different directions counterbalanced each other.

The diurnal variation in the velocity of the wind is shown in Table VII, which gives the total movement for each hour of seventy-fifth meridian time, as deduced from self-registering anemometers at about 136 stations.

HIGH WINDS.

Maximum wind velocities of 50 miles or more per hour were reported at regular stations of the Weather Bureau as follows (maximum velocities are averages for five minutes;